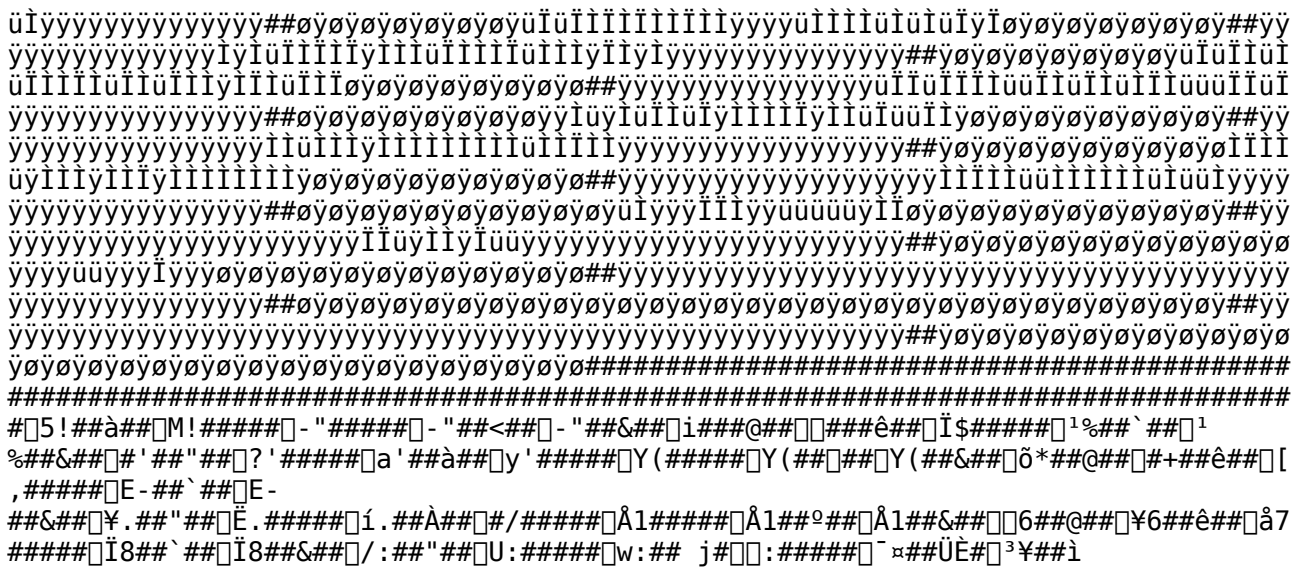

```
################# #########################@ÿ□#ÿÿd#########Z#########2##□###ö#üþ
      {#ÿÿ####ÿÿ####Aÿ□#ÿÿd#########Z#########¤###PAS-C:  PDES Application
Protocol Suite for CompositesContract:   Wright Patterson AFBDuration: July 1991
- March 1997Status:    3 Months leftValue:    $5.4 million
```

```
################# ########################@ÿ□#ÿÿd#########Z#########2##□##òõåûî
      K#ÿÿ####ÿÿ####Aÿ»#ÿÿd#########Z#########`###
```

Reduce cost of composite parts
Reduce interpretation/communication timeStandardize product data

```
###############
###########6#############P#□#ÿÿd#########d#2#########Q#□#ÿÿd#########d#2########
#Q#□#ÿÿd#########d#2#########Q#□#ÿÿd#########d#2#########Q#□#ÿÿd#########d#2####
###3##□##Ðõoûûû□þÿÿ####ÿÿ####@ÿ□#ÿÿd#########d#########¼###Product Data Group
```

PackagingProduct Structure BasedProduct/Document RelationshipsExchange Configuration ParametersTies all Forms of Product Data together (Both STEP and Non-STEP data)

```
###############
#########S#####
###########r#############P#□#ÿÿd#########d#2#####

###Q#□#ÿÿd#########d#2#########Q#□#ÿÿd#########d#2#########Q#□#ÿÿd#########d#2##
#######Q#□#ÿÿd#########d#2#########Q#□#ÿÿd#########d#2#########Q#□#ÿÿd#########d
#2#######3##□##æ#□ûl
4þÿÿ####ÿÿ####@ÿ□#ÿÿd#########d#########q###Document ConfigurationVersioning
Representation FormsIdentification of Content File(s)Configuration Parameters#
```

```
###Q#□#ÿÿd#########d#2#######3##□##2#¿#l
Â#ÿÿ####ÿÿ####@ÿ□#ÿÿd#########d#########µ###Product Data Sets (Shape)Advanced B-
RepresentationFacetted B-RepresentationManifold Surfaces with TopologyWireframe
and Surface without TopologyWireframe Geometry with Topology□
```

###@ÿ□#ÿÿd#########d#########s##□##´÷
ø##îùÿÿ####ÿÿ####@ÿ□#ÿÿd#########Z#########>###AP 232: Technical Data Packaging
Core Information and Exchange

```
###########################
#############@ÿ□#ÿÿd#########d###########@ÿ□#ÿÿd#########d#########1##□##qù1øâ#q
úÿÿ####ÿÿ####@ÿ□#ÿÿd#########d#########3###Technical Data Package (TDP) Project
Relationships#
```

```
###########
###############################################################@ÿ#ÿÿd#########d
#######     ###@ÿ#ÿÿd#########d###########@ÿ#ÿÿd#########d#########1#####öQû
¢ü#ÿÿÿ####ÿÿ####@ÿ#ÿÿd#########d##########\###Types of Relationships:Part to
PartPart to DocumentDocument to DocumentDocument  to Part
```

```
#########################################################################2######
#\#############@ÿ□#ÿÿd#########d#######
###@ÿ□#ÿÿd#########d###########@ÿ□#ÿÿd#########d###########@ÿ□#ÿÿd#########d####
#######@ÿ□#ÿÿd#########d#########1##□##P#³#Â
□#ÿÿ####ÿÿ####@ÿ□#ÿÿd#########d#########w###CAD DWG FILE   PARTS LIST  NOTES
LISTCAD LAYOUT FILEMATERIAL  X,  QTY  A□PROCESS SPECIFICATIONNC PROGRAM
      FIXTURE DEÿ
```

################# #########################@ÿ□#ÿÿd#########Z#########2##□##ºõ½üv £#ÿÿ####ÿÿ####Aÿ□#ÿÿd#########d#########,###A document may be a group of product data about one or more products that supports one or more applications not just paperA document can reside in:various formats (e.g., Raster, SGML, Word, IGES, STEP)one electronic file or across multiple electronic filesa view within a product structure.

```
###########
###############################################################@ÿ□#ÿÿd#########d
#######

###@ÿ□#ÿÿd#########d###########@ÿ□#ÿÿd#########d#########1##□##âû¾ü□#Â#ÿÿ####ÿÿ#
###@ÿ□#ÿÿd#########d#########□###CAD  DWGDYNAMICS ANALYSISSTRESS ANALYSISPART
YYY-017PART ZZZZ-003PART AAAA-001SPEC. 12223SPEC. 22222TOOL DESIGN A1D2      NC
PROGRAM
```

```
###########################################@ÿ#ÿÿd#########d#########1#####Zù>þþ
ü@#ÿÿ####ÿÿ####@ÿ#ÿÿd#########d#########1###CAD DWGSTRESS ANLY.PART YYYPART XXX
SEC. 12223#
```

```
###########################################@ÿ□#ÿÿd#########d#########r##□##ªöÝ÷V
      súÿÿ####ÿÿ####@ÿ□#ÿÿd#########Z#########7###PDM  Data and Access#(Data
Definition Exchange Overlay)ÿ
```

```
###########################################@ÿ□#ÿÿd#########d#########1##□##□ø>þ-
ü@#ÿÿ####ÿÿ####@ÿ□#ÿÿd#########d#########1###CAD DWGSTRESS ANAL.PART YYYPART XXX
SEC. 12223þ
```

###@ÿ□#ÿÿd#########d#########1##□##âõt##
´#ÿÿ####ÿÿ####@ÿ□#ÿÿd#########d#########Ó###DESCRIBES DATA NEEDED TO SATISFY THE
BUSINESS PURPOSE FOR THE EXCHANGE   DESCRIBES THE DATA THAT IS BEING
TRANSMITTED   DESCRIBES THE BUSINESS CONTEXT OF THE EXCHANGE   PURPOSE,
PRODUCT/ITEM FOCUS....ÿ

```
#########################@ÿ□#ÿÿd#########d###########@ÿ□#ÿÿd#########d#########1
##□###öêüHù
þÿÿ####ÿÿ####@ÿ□#ÿÿd#########d#########0###Exchange Reason:Revision Update Data
Submittal
```

#################
########################@ÿ□#ÿÿd#########d###########@ÿ□#ÿÿd#########d#######
###@ÿ□#ÿÿd#########d#########1##□##□ûjûÒ#□üÿÿ####ÿÿ####@ÿ□#ÿÿd#########d########
#C###TitleDDE for Composite Bond AssemblySkin, Horizontal Stabilizer#

```
#########@ÿ□#ÿÿd#########d#########A###  0              ABD-001
Horizontal Assy                      80378
N  1              ABD                 Box  Assy Dwg           B           80378
3              DRABD      4.0mb       RASTER    N  1              STR-AD1
Stress Anly. FEA        80378                              STRAD1     2.3mb
AP 209       N  1              DP1-YYY         Skin Panel                 C
94444
N  2              DP1   Bond Assy Dwg       C            94444             6
DRDP1       1.9mb       AP 202        Y  3              PL-DP1             Parts
List                  D            94444             4               PLDP1
1.0mb      TDP PL        Y  2              SPEC-112        Process Spec.
1             94444             8               SP322         0.8mb      SGML
N  2              NCP-1              APT Program            D            94444
NCP11        0.3mb      ASCII          N
NCP12        0.5mb      ASCII           N  1              DP2-XXX          Web
Stiffener           A            80378
N  1              SPEC-12223     Process Spec.          0           80378
15                                                                       Nt
```

```
################# #########################@ÿ□#ÿÿd#########Z#########2##□##ªö½üV
      £#ÿÿ####ÿÿ####Aÿ□#ÿÿd#########d#########^###Computer processable
Associated ListsParts List, Indentured Data List,Data List,Index List
```

```
#################
#########################@ÿ#ÿÿd##########Z#########2####êõû##ÿÿ####ÿÿ####Aÿ
#ÿÿd#########d#########\###Utilize common Information Structure for both
document and part view of product information
```

################# #########################@ÿ□#ÿÿd#########Z#########2##□##êõ]üæ
      Ã#ÿÿ####ÿÿ####Aÿ□#ÿÿd#########Z#########□###Represent both commercial and government requirements for the information and functionality of associated lists Provide an expedient migration path into STEP for enterprises and industries that have large infrastructures that rely on document based management systemsAccommodate both a product item based and a document based configuration identification capability of the same product technical data

################# #########################@ÿ□#ÿÿd#########Z#########2##□##êõ]üæ
      Ã#############@ÿ□#ÿÿd#########Z#########ú###Improve data retention/archival processes Captures the relationships between the product structure and the document structureCan store product information from a document based view and be able to use the information from a product item perspectiveAllow technical data which is computer interpretable to be exchanged Standardizes computer processable associated list information (e.g., Parts Lists, Notes Lists, Data Lists)Enable effective automation of business processes associated with product data

################# ########################@ÿ□#ÿÿd#########Z#########2##□##êõ]üæ Ã#ÿÿ####ÿÿ####Aÿ□#ÿÿd#########Z#########□###Standard represents Gvt and Industry reqmtsStandard is basis for:Technical Data Package (TDP) exchangePDM System implementationDocument or part view of product informationStandard is progressing through ISO processExtends current STEP capabilitiesAgreement from X countries to work on effortReference Model has had extensive review by US and International (government and industry) personnel#

################# ########################@ÿ#ÿÿd#########Z#########2####êõ]üæ
Ã#ÿÿ####ÿÿ####Aÿ#ÿÿd#########Z#############Digital Copy - Gordon Ney or Greg A. PaulWordPerfect 6.1 FormatRequires ZIP utility for extractPaper Copy - Greg A. PaulUS Mail: Lockheed Martin Tactical Aircraft Systems   P. O. Box 748, MZ 2269   Ft. Worth, TX 76101Phone: 817/777-5041 Email: L108632@lmtas.lmco.com#